Quantification and analysis of offensive situations in sided games in soccer

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Introduction

Playing soccer in reduced spaces has become particularly important, as this type of play offers a great deal of possibilities and combinations and gives players an increased level of interaction. Nevertheless, players' need to interact with each other turns any defending or attacking situation into complex moves with a wide range of variables to be considered, in which the player is never isolated and must make the move that has the most positive impact on play.

Objectives

The objectives of this study were: a) group together the most used technical offensive actions for each format of sided game, playing surface and age group; b) identify the variables with greater relevance; c) determine the main differences among the 3 playing surfaces, 3 game formats and 2 age groups for the most relevant technical offensive variables; d) perform an overall analysis of the technical offensive variables and propose its practical implications.

Materials & Methods

54 sided games played in three different formats (5v5, 7v7 and 9v9) and with two age groups (U9 and U14) were filmed at three soccer clubs in Spain. This study used the observational method; it is descriptive and is applied through well-prepared systematic quantitative observation in a natural environment. The equipment used for organising the games consisted of balls, different coloured bibs, cones and markers, mini goals and seven-a-side goals. The pitch sizes were 20x30m for 5v5, 30x45m for 7v7 and 45x60m for 9v9.

Results

The results showed that there were significant variations depending on the game format and playing surface, and the study will present a description and analysis of the aspects that had considerable influence on attacking moves in the different formats of sided game, playing surface and age group.

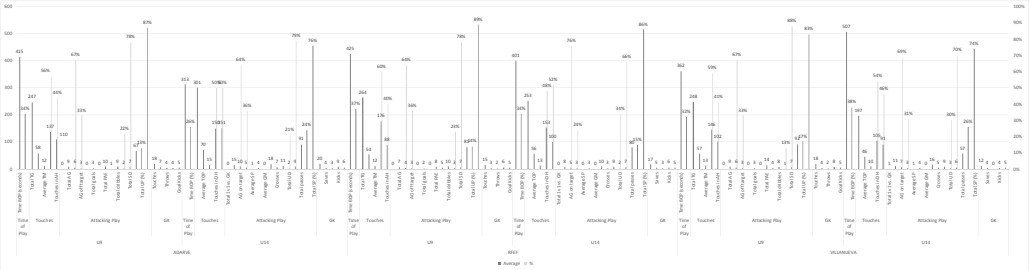

Figure 1. Results of the variables for 5v5,U9 and U14.

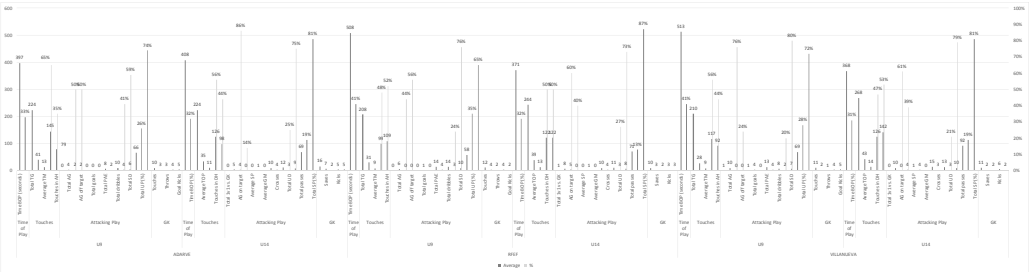

Figure 2. Results of the variables for 7v7, U9 and U14.

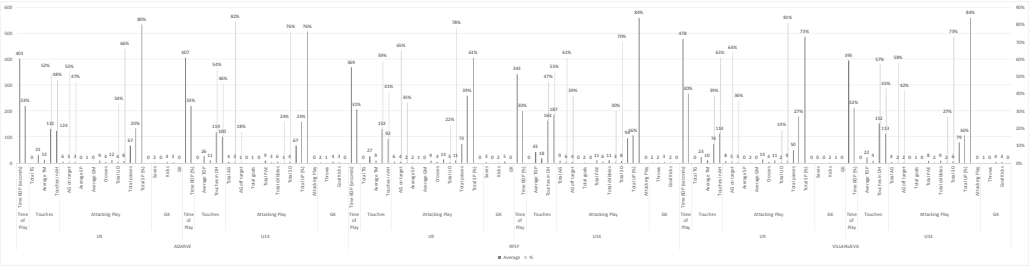

Figure 3. Results of the variables for 9v9, U9 and U14.

Discussion

There are more touches of the ball and attacking play in the smaller game formats; values were significantly higher in 5v5 and 7v7 than in 9v9 (same for goalkeepers). There was a higher frequency among the variables for attacking play in all age groups and playing surfaces in the smaller game formats. On artificial turf, the ball was out of play considerably longer in the U-9 age group (41%) than in the U-14 age group (32%). The ball was out of play in U-9 less time in the 5v5 format and for more time in the 7v7 and 9v9 formats, making play more broken and directly influencing its intensity. There was a much higher percentage of success across the data collected in the U-14 age group than in the U-9 (87% compared to 64% in 7v7, and 83% compared to 73% in 9v9).

Conclusions

All variables are interrelated and change uniformly depending on the playing surface, game format and age group. Players are involved in more decisions and moves in small-sided formats, resulting in a greater volume in practice; therefore the variables can't be seen as isolated moves but as part of a co-evolution. It is key to choose a format that gives the players a sense of freedom, encouraging their creativity while being able to manage the spaces according to their technical, anthropometric and physiological characteristics. There is a development (from 5v5 to 9v9) which can be applied and directly transferred to 11v11 football. If an 11-a-side soccer pitch (approx. 100 x 70 meters) is divided into different imaginary spaces (based on lines/positions, pitch areas, duels among players, triangles, etc.), the concept of "reduced spaces" can also be applied to soccer played in these dimensions for a large number of moves.

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